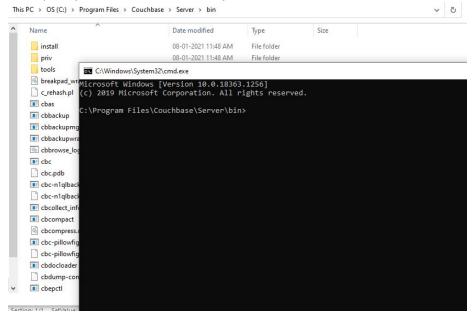
NoSQL Basics/Fundamentals Spring AU 2021

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Assignment:

- 1. Import `travel-sample` bucket
- 2. Write a query to get the sum of all distances where type="route" for each airline id.
- 3. Write queries to join(LEFT,RIGHT,INNER) type="route"&"airline" and fetch the data whose sourceairport="SFO"
- 4. Write a mapreduce to get the number of all documents based on entities(type).
- 5. Refer CLI interface & try to export the travel sample data. Below are the steps:
 - a) Go to Couchbase Bin folder C:\Program Files\Couchbase\Server\bin
 - b) Open Command Prompt from the bin folder



- c) Run the below command to export the data from travel-sample bucket: cbexport json -c couchbase://127.0.0.1 -u <USER NAME> -p <password> -b travel-sample -o C:/travelSample.json -f lines -t 4
- D) Create a new Bucket "NewBucket" & import the data to it:

cbimport json -c couchbase://127.0.0.1 -u <User Name> -p <password> -b NewBucket -f lines -d file://C:/travelSample.json -t 4 -g %id%

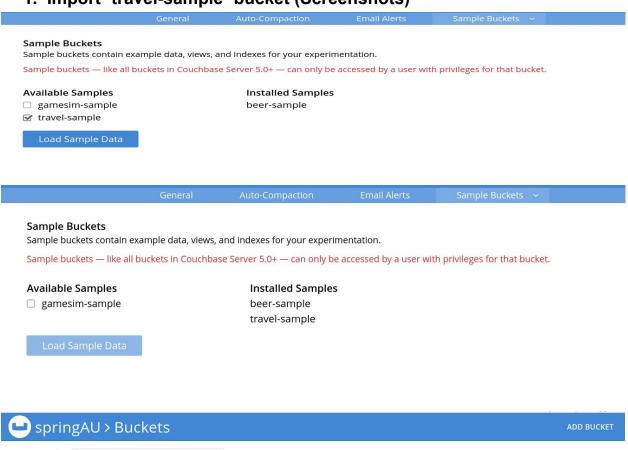
E) Once the data is imported, please attach the screenshot.

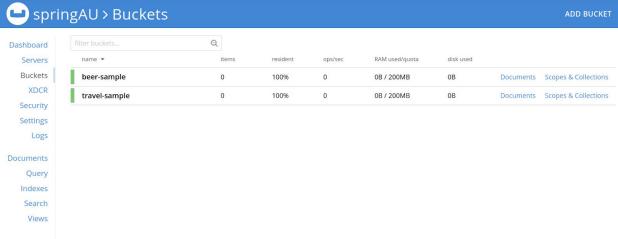
Note:

- -u --> Userld which you've created -p --> password -b --> bucket name

OS: Ubuntu 20.04 | Couchbase version: 7.0 (BETA)

1. Import `travel-sample` bucket (Screenshots)





2. Write a query to get the sum of all distances where type="route" for each airline id.

Query:

```
SELECT airlineid,

COUNT(airlineid) AirlineCount,

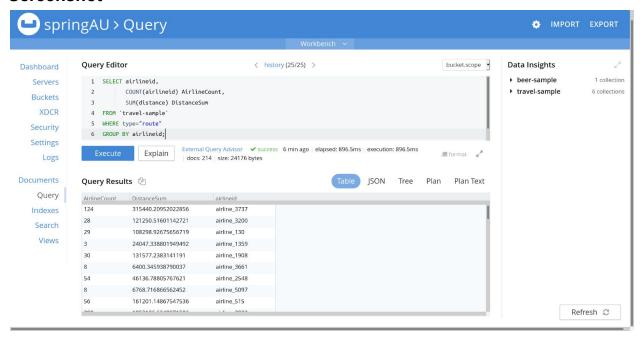
SUM(distance) DistanceSum

FROM `travel-sample`

WHERE type="route"

GROUP BY airlineid;
```

Screenshot



3. Write queries to join(LEFT,RIGHT,INNER) type="route"&"airline" and fetch the data whose sourceairport="SFO"

Inner Join:

```
-- Inner join

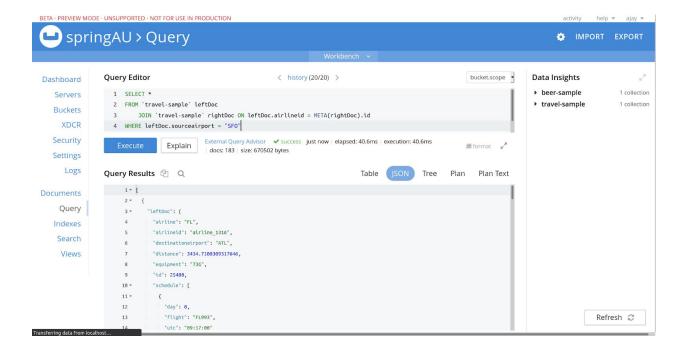
SELECT *

FROM `travel-sample` leftDoc

JOIN `travel-sample` rightDoc ON leftDoc.airlineid =

META(rightDoc).id

WHERE leftDoc.sourceairport = "SFO"
```



Left Join:

```
-- Left join

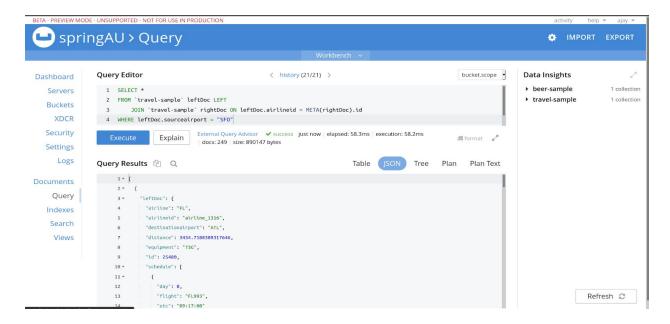
SELECT *

FROM `travel-sample` leftDoc LEFT

JOIN `travel-sample` rightDoc ON leftDoc.airlineid =

META(rightDoc).id

WHERE leftDoc.sourceairport = "SFO"
```



Right Join:

```
-- Right join

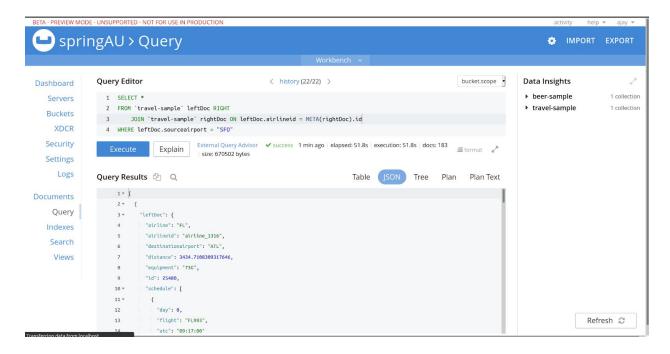
SELECT *

FROM `travel-sample` leftDoc RIGHT

JOIN `travel-sample` rightDoc ON leftDoc.airlineid =

META(rightDoc).id

WHERE leftDoc.sourceairport = "SFO"
```



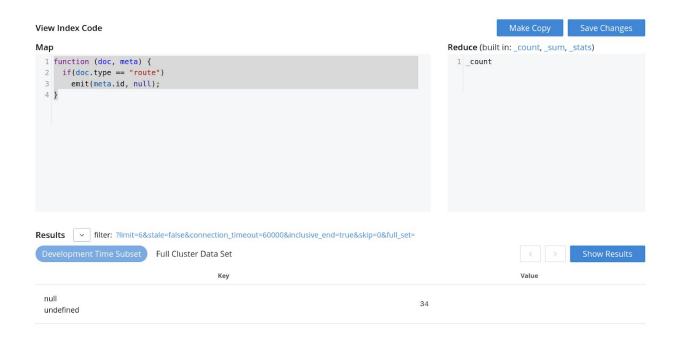
4. Write a MapReduce to get the number of all documents based on entities(type)

Map code:

```
function (doc, meta) {
  if (doc.type == "route")
    emit(meta.id, null);
}
```

Reduce function: _count

Screenshot:



5. Refer CLI interface & Damp; try to export the travel-sample data.

Export Command: ./cbexport json -c couchbase://127.0.0.1 -b travel-sample -o ~/Downloads/travelSample.json -f lines -t 4 -u ajay --scope-field _default -p

Note: Had to give the "--scope-field _default" to export without error

Screenshots:

```
sjaymajay-Predator-PH313-51:/opt/couchbase/bln$ ./cbexport json -c couchbase://127.8.8.1 -b travel-sample -o -/Downloads/travelSample.json -f lines -t 4 -u ajay --scope-field _default -p
Password:
Sign experted to `/home,sjay/pownloads/travelSample.json` successfully
Documents exported: 31591 Documents skipped: 0

ajaymajay-Predator-PH313-51:/opt/couchbase/bln$ 

ajay--scope-field _default -p

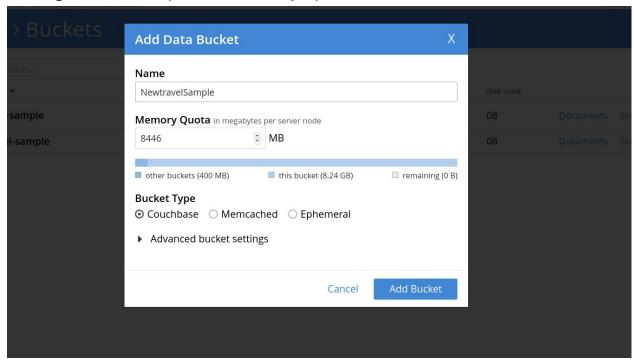
ajay --scope-field _default -
```

travelSample.json:



Import Command: ./cbimport json -c couchbase://127.0.0.1 -u ajay -b NewtravelSample -f lines -d file:///home/ajay/Downloads/travelSample.json -t 4 -g %id% -p

Adding new Bucket(NewtravelSample):

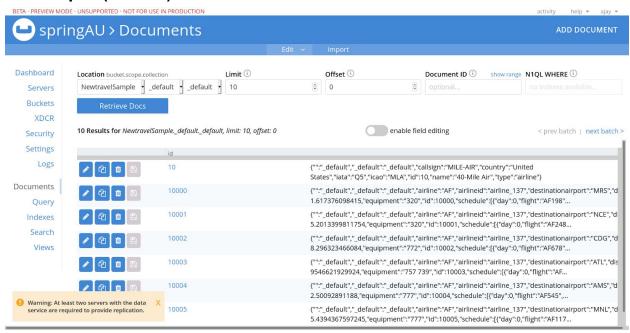


CLI (Import):

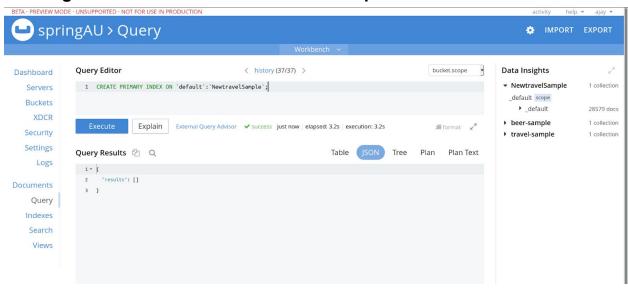
ejay@ajsy=Predator-PH315-51:/opt/couchbase/bin\$./cbimport json -c couchbase://127.0.0.1 -u ajay -b NewtravelSample -f lines -d file:///home/ajay/Downloads/travelSample.json -t 4 -g %ld% -p Password:

JSON `file:///home/ajay/Downloads/travelSample.json` imported to `couchbase://127.0.0.1` successfully
Documents imported: 31591 Documents failed: 0
ajay@ajay-Predator-PH315-51:/opt/couchbase/bin\$ [

After import(Web UI):



Creating PRIMARY INDEX on NewtravelSample



Simple Select with limit as 100 on NewtravelSample

